

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method, for use in a wireless communications system, of transmitting data for a plurality of services between a base station and a subscriber station, wherein in a radio communications system in which data for a the plurality of services is transmitted between the base station and the subscriber station simultaneously as a frame comprised of blocks of data in a frame, the method comprising:

setting a ~~service-specific~~ block size as to be a smallest transmission unit for data ~~from~~ for each of the plurality of services transmitted in the frame, the block size being service-specific;

~~signaling~~ outputting a signal that indicates a number of blocks of data per service to be transmitted in the frame;

obtaining an arrangement of ~~the~~ blocks of data for the plurality of services in the frame ~~from~~ based on the number of blocks of data per service and a predetermined coding;

entering the blocks of data for the plurality of services in the frame in accordance with the predetermined coding;

transmitting, from the base station via a wireless connection, the frame having the blocks of data for the plurality of services ~~via a radio interface~~; and

reading, at the subscriber station ~~a receiving end~~, the received data from the frame in accordance with ~~the~~ a signaled number of blocks of data per service and the predetermined coding.

2. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the predetermined coding ~~indicates~~ corresponds to a sequence of the blocks of data for the plurality of services.

3. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the predetermined coding ~~indicates~~ corresponds to a number of transmission channels that ~~which~~ are used simultaneously between the base station and the subscriber station.

4. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the frame data is transmitted via a plurality of broadband transmission channels, and the predetermined coding ~~indicates~~ corresponds to a spread factor used in the plurality of broadband transmission channels.

5. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the number of blocks of data per service in the frame is signaled as an absolute statement.

6. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the number of blocks of data per service in each frame is signaled relative to a statement for a preceding frame.

7. (Currently Amended) The method ~~as claimed in~~ of claim 5, wherein the number of blocks of data per service ~~is varied~~ varies from frame to frame in increments having different sizes ~~steps of a different size~~.

8. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the predetermined coding is defined on a system-wide basis.

9. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the predetermined coding is defined when setting up a connection between the base station and the subscriber station.

10. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the predetermined coding reduces ~~the~~ a number of transmission channels per connection between the base station and the subscriber station.

11. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the block size is one bit.

12. (Currently Amended) A ~~radio~~ wireless communications system, comprising:
a base station; ~~[[,]] a radio interface~~ and

a subscriber station connected to the base station via ~~the radio interface~~ a wireless connection;

wherein the base station is configured to transmit, to the subscriber station, a frame comprised of blocks of data for a plurality of services, the blocks of data having using a service-specific block size as that is a smallest transmission unit for of data per service, the block size being service-specific;

wherein the base station comprises:

signaling means ~~which~~ that outputs a signal that indicates ~~signals~~ a number of blocks of data per service ~~for a frame~~ to be transmitted in the frame;

coding means ~~which~~ that enters the blocks of data in the frame in accordance with a predetermined coding, the plurality of services, and the number of blocks of data per service; and

transmission means ~~which~~ that transmits the frame to the subscriber station via the wireless connection ~~radio interface~~; and

wherein the subscriber station comprises:

decoding means ~~which, at a receiving end,~~ that reads ~~the~~ the received data from the frame in accordance with the predetermined coding and ~~the~~ a signaled number of blocks of data per service.

13. (Currently Amended) The system of claim 12, wherein, the predetermined coding ~~indicates~~ corresponds to a sequence of ~~the~~ blocks of data in the frame.

14. (Currently Amended) The system of claim 12, wherein, the predetermined coding ~~indicates~~ corresponds to a number of transmission channels ~~which that~~ are used simultaneously between the base station and the subscriber station.

15. (Currently Amended) The system of claim 12, wherein, ~~the~~ data is transmitted between the base station and the subscriber station via a plurality of broadband transmission channels, and wherein the predetermined coding ~~indicates~~ corresponds to a spread factor used in the plurality of broadband transmission channels.

16. (Currently Amended) The system of claim 12, wherein, the number of blocks of data per service varies from frame to frame in increments having different sizes ~~steps of different size~~.

17. (Previously Presented) The system of claim 12, wherein, the predetermined coding is defined when establishing a connection between the base station and the subscriber station.

18. (Currently Amended) A method of transmitting data for a plurality of services, the method comprising:

~~implementing~~ establishing a ~~service-specific~~ block size ~~for use as~~ comprising a smallest transmission unit for data from each of the plurality of services, the data being transmitted ~~as in~~ blocks in a frame, the block size being service-specific;

determining a number of blocks of data in the frame based on ~~the a service-specific~~ block size for each of the plurality of services;

outputting a signal to a receiver, the signal indicating a number of blocks of data per service transmitted in the frame;

entering the blocks of data in the frame based on the number of blocks of data and a predetermined coding; and

transmitting the frame to the receiver via a wireless connection ~~radio interface~~.

19. (Canceled)

20. (Currently Amended) The method of claim 18 ~~19~~, further comprising:

receiving the frame at the receiver ~~station~~; and

reading data in the frame at the receiver ~~station~~ based on the number of blocks of data per service and the predetermined coding.

21. (Currently Amended) An apparatus to transmit data for a plurality of services in a frame, comprising:

a coding circuit to

(i) set a ~~service-specific~~ block size as to be a smallest transmission unit for data ~~from~~ for each of the plurality of services, the data being transmitted in blocks in the frame, the block size being service-specific;

(ii) obtain an arrangement of the blocks of data for the plurality of services in the frame ~~from~~ based on a number of blocks of data per service and a predetermined coding; and

(iii) enter the blocks of data in the frame in accordance with the predetermined coding;

a signaling circuit to output a signal indicating a number of blocks of data per service transmitted in the frame; and

a transmitting circuit to transmit the frame via a wireless connection ~~radio interface~~.

22. (Currently Amended) The apparatus in claim 21, wherein the predetermined coding ~~indicates~~ corresponds to a sequence of ~~the~~ blocks in the frame.

23. (Currently Amended) The method as claimed in claim 21, wherein the data is transmitted via a plurality of broadband transmission channels, and the predetermined coding ~~indicates~~ corresponds to a spread factor used in the plurality of broadband transmission channels.